REMARKS

The Applicants have thoroughly considered the Official Action dated September 19, 2002 and has prepared this response thereto. The Applicants have concurrently submitted a Petition for Two-Month Extension of Time, and the required extension fee. The Applicants have cancelled claims 2 and 8 – 14 without prejudice. The Applicants amended claim 1 to more narrowly define the claimed housing and to include the limitations of cancelled claim 2, and amended claims 3 and 4 to change their dependency from cancelled claim 2 to claim 1. Claims 1 and 3 – 7 remain in the application.

The Applicants assert that amended claim 1, and claims 3 – 7 that depend therefrom, is allowable and, for the following reasons, request that the rejections be reconsidered and all claims allowed. The following remarks will follow the order set forth in the Office Action.

Drawings

The Applicants noted the requirement that new corrected drawings be provided in response to the Official Action. However, the Applicants respectfully disagree that there is any legal basis, either under the cited *37 CFR 1.85(a),* or under *MPEP 608.02 et seq.*, not to hold this requirement in abeyance at this point in the prosecution.

Under *MPEP 608.02(a)*, if the drawings did not permit a reasonable examination of the application, notice should have been immediately sent to the Applicants and examination halted pending submission of new drawings. However, no objection was made to the thickness or quality of the lines, either prior to examination, or in the first Official Action. Further, no rejection under 35 USC §112 was made in either Office

Action, as should have been the case had the drawings rendered any of the claims indefinite. For these reasons, the Applicants assert that the submission of formal drawings is not necessary to further consideration of the claims, and that these objections should properly be held in abeyance until allowable subject matter was indicated.

The Applicants note that it is not merely being argumentative with regard to this issue. The Applicants will need to spend an additional $500.00 for the preparation of formal drawings. Further, this expense will be for naught if the application is not later allowed. If the application is allowed, the Applicants intend to bear this expense and submit formal drawings. However, due to the uncertain current status of this application, the requirement that formal drawings be submitted is unduly burdensome to the Applicant sat this time.

For these reasons, the Applicants have not submitted formal drawings at this time and request that the objection be held in abeyance until allowable subject matter is indicated. *See 37 CFR §1.111(b).*

Claim Rejections – 35 USC §103

Claims 1 – 5 were rejected under 35 U.S.C. §103 as obvious in view of DeBush in combination with Williams. In making this rejection, it was asserted that DeBush teaches all of the claimed elements except for the claimed adjustable hub, and that:

> "Williams teaches a similar type of flow meter or spirometer having adjustable means 91 to bias vane 37 attached to the bottom of the housing 3 as shown in Figure 3, said adjustable means inherently allowing the vane shaft 53 to rotate to a predetermined position with a torsion spring as in element 93 comprising a first end engaged with said adjustable hub 97 and a second end engaged with said shaft 53 as noted in Col. 5, lines 30-42 (note that the cap 97 is tightly fitted and therefore it remains stationary with respect to the chassis 3, therefore allowing the vane to move as selected up to a point dictated by the spring means)." *Office Action, Page 4-5.*

The Applicants respectfully disagree with this assertion, as neither Williams nor DeBush teaches an "adjustable hub attached to said bottom portion of said housing", nor the Applicant's two-piece housing, as claimed in amended claim 1.

The adjustment of the vane in Williams is shown in FIG. 3 and described at column 5, lines 30-42, which states that:

> "A fourth means 91, shown in FIG. 3, is provided along with vane 37 to render an adjustable bias to vane 37 in either direction. One embodiment of fourth means 91 is shown in FIG. 2 to include a coil spring 93, positioned near vane pivotal edge 43 wherein one end of coil spring 93 is attached to vane shaft 53 and the other end attached to a cap 97 that fits tightly by friction down into cylinder 57. A small slot 99 is formed in cap 97 to receive the blade of a standard screwdriver to twist or reposition cap 97 and spring 93 one way or the other to increase or decrease the bias on vane 37. This is useful in calibrating the spirometer." *Williams at column 5, lines 30 – 42.*

The Applicant asserts that the frictionally mounted cap and cylinder arrangement of Williams neither reads upon, not suggests, the Applicant's claimed adjustable hub.

First, the cap and cylinder arrangement of Williams is not attached to the bottom portion of the housing. Rather, this means "91" attaches to the chassis, which is fully concealed by the "housing bottom cover 25" that attaches about "chassis edge 9". *Id. at column 3, lines 45-46.* This "bottom cover 25" of Williams is the element that relates to the bottom portion of the Applicant's housing and not the chassis 3, to which the cap and cylinder mates.

The reason for Williams' inclusion of a separate bottom cover is evident from a cursory review of the specification. The spirometer of Williams is designed to automate the reading of the device through the use of a Hall Effect device 73 that senses the movement of an internal magnet 71 and sends an output to a microprocessor 79, which computes the airflow and sends the result both to a display for reading by the user and to

memory for download by a physician. Because of these relatively expensive internal parts, the need to change batteries, and the need for the physician to adjust DIP switches, the bottom cover 25 of Williams is a separate and removable feature of the spirometer. *See Id., at column 6, lines 13 – 18.*

Conversely, the Applicant's claimed peak flow meter is a relatively inexpensive unit that is merely intended to provide a user with a visual indication of peak flow, and does not include any electronics that would require batteries. *See Application, page 6, lines 15 – 18.* Accordingly, the Applicant utilizes a simple two-piece housing that is molded, permanently assembled, and calibrated using the adjustable hub. Because of this fact, it is imperative that the adjustable hub be located upon the bottom portion of the housing, as this cover may not be removed after assembly.

The Applicant's two-piece housing was affirmatively claimed via the applicant's amendment of claim 1, which substituted the open ended term "comprising" with the closed ended "consisting of". Therefore, the combination of DeBush and Williams does not literally read upon the Applicant's invention.

Looking now to the alleged suggestion to modify DeBush, based upon the adjustment means 91 of Williams, to include the claimed adjustable hub, the Applicants assert that no such suggestion exist in the documents themselves and that such a modification would be unsuccessful at achieving the results of the Applicants' claimed invention. The bottom cover 25 of Williams "is preferably made removable from chassis 3 for ease in changing the batteries, cleaning the air passageways, and selecting various positions of the dip switch 111 to isolate certain parameters apart from one another". *Williams, at column 6, lines 13 – 18.* Because this cover is removable, the

spring attached between the adjustable hub and vane would likewise need to be removable. However, this is impractical given the arrangements of both DeBush and Williams, as such removability would require the disconnection of the spring from the vane and, consequently, a subsequent recalibration of the meter once the cover was replaced. Given the fact that such calibration must be done at the factory, this would mean that the use would need to send the unit back to the manufacturer, or live with reduced accuracy, effectively defeating the purpose of the adjustable hub.

For the reasons set forth above, the Applicants assert that claim 1, as amended, is novel and unobvious in light of the cited art. Further, insofar as claims 3 – 7 depend from claim 1, the Applicants assert that these claims are likewise novel and unobvious.

Conclusion

It is felt that a full and complete response has been made to the Official Action and, as such, places the application in condition for allowance. Such allowance is hereby respectfully requested. If the Examiner feels, for any reason, that a personal interview will expedite the prosecution of this application, the Examiner is invited to phone the Applicants' attorney at his new address, as set forth below.

Respectfully submitted,

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Claims 1 and 8; with indicia of amendment

1. A peak flow meter comprising:

a substantially hollow housing ~~comprising~~ consisting of a top portion having a slot and a scale disposed proximate to said slot, a bottom portion, an air inlet and at least one air outlet;

a flow restriction disposed within said housing and in fluid communication with said air inlet, said flow restriction being dimensioned to create a back pressure within said housing;

a vane assembly disposed within said housing, said vane assembly comprising a vane, a post to which said vane is fixedly attached, and an adjustable hub attached to said bottom portion of said housing, wherein said adjustable hub is dimensioned to allow said post to be rotated to a predetermined position;

a torsion spring comprising a first end engaged with said adjustable hub and a second end engaged with said post; and

an indicator for indicating a peak flow rate of air based upon a movement of said vane, wherein said indicator is a visual indictor movably disposed within said slot, said visual indicator being dimensioned to be moved by said vane when said vane is rotated by said stream of air and to maintain a peak flow position within said slot upon cessation of said stream of air; and

wherein a user blows a stream of air into said air inlet, a first portion of said stream of air passes through said flow restriction and is vented through said at least one air outlet, a second portion of said stream of air contacts said vane and

causes said vane to rotate against said torsion spring, and said indicator indicates the peak flow rate of said stream of air based upon said movement of said vane.

3. The peak flow meter as claimed in claim ~~2~~ 1 wherein said visual indicator is a unitary plastic indicator having a flexible tab for maintaining said peak flow position within said slot upon cessation of said stream of air.

4. The peak flow meter as claimed in claim ~~2~~ 1 wherein said slot forms an arc about an axis defined by a centerline of said post of said vane assembly, said arc subtending an angle of more than one hundred and eighty degrees.